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TO: COMMISSIONER FOR PATENTS
ATTN.: EXAMINER John H. Le

Technology Center: 2800
Art Unit: 2863

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SUBJECT: OFFICIAL APPELLANT'S REPLY BRIEF responsive to
EXAMINER'S ANSWER dated 11/16/2004 for
SN: 10/053,748

MESSAGE

To Whom It May Concern:

Received by US Patent and Trademark Office:

Official Appellant's Reply Brief (15 pages) pursuant to 37 CFR 41.41(a)
with Cert. of Fax Transmission on pg. 15; and
Transmittal of Reply Brief (1 page, 2 copies) with Cert. of Fax Trans.

For Patent Application of:

Lee A. Barford

Serial Number: 10/053,748

Filed: Jan. 18, 2002

Entitled: "Revising a Test Suite using Diagnostic Efficacy Evaluation"

From: J. Michael Johnson, Reg. No. 37,856
(for Herbert R. Schulze, Esq., Reg. No. 30,682, Agilent Technologies,
Inc.)

Attorney Docket No.: 10980101-1

Dated: January 12, 2005

CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8

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J. Michael Johnson

1/12/05
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ATTORNEY DOCKET NO. 10980101-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Lee A. Barford

Serial No.: 10/053,748

Examiner: John H. Le

Filing Date: January 18, 2002

Group Art Unit: 2863

Title: REVISING A TEST SUITE USING DIAGNOSTIC EFFICACY EVALUATION

COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria VA 22313-1450

TRANSMITTAL OF REPLY BRIEF

Sir:

Transmitted herewith is the Reply Brief with respect to the Examiner's Answer mailed on November 16, 2004. This Reply Brief is being filed pursuant to 37 CFR 1.193(b) within two months of the date of the Examiner's Answer.

(Note: Extensions of time are not allowed under 37 CFR 1.136(a))

(Note: Failure to file a Reply Brief will result in dismissal of the Appeal as to the claims made subject to an expressly stated new grounds of rejection.)

No fee is required for filing of this Reply Brief.

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Respectfully submitted,

Lee A. Barford

By

J. Michael Johnson
J. Michael Johnson
Attorney/Agent for Applicant(s)

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Date: January 12, 2005

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ATTORNEY DOCKET NO. 10980101-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Lee A. Barford

Serial No.: 10/053,748

Examiner: John H. Le

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Group Art Unit: 2863

Title: REVISING A TEST SUITE USING DIAGNOSTIC EFFICACY EVALUATION

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Respectfully submitted,

Lee A. Barford

By



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PATENT APPLICATION
ATTORNEY DOCKET NO. 10980101-1

REPLY BRIEF dated January 12, 2005

OFFICIAL

Appl. No. : 10/053,748
Applicant : Lee A. Barford
Filed : Jan. 18, 2002
TC/A.U. : 2800/2863
Examiner : John H. Le

Confirmation No. 5462

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Docket No. : 10980101-1
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Title : REVISING A TEST SUITE
USING DIAGNOSTIC
EFFICACY EVALUATION

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P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANT'S REPLY BRIEF

Sir:

This is a Reply Brief under 37 CFR 1.193(b) (now 37 CFR 41.41) to an EXAMINER'S ANSWER mailed 11/16/04 (hereinafter 'Examiner's Answer'). The Examiner's Answer was in response to APPELLANT'S BRIEF ON APPEAL filed February 17, 2004 (hereinafter 'Appeal Brief').

GROUPING OF CLAIMS is discussed beginning on page 2 of this paper.

PRIOR ART OF RECORD is discussed beginning on page 3 of this paper.

RESPONSE TO ARGUMENTS is discussed beginning on page 3 of this paper.

A Certificate of Mailing or Transmission is provided on the last page of this document and applies to this document and any Appendix attached hereto.

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GROUPING OF CLAIMS

In the Examiner's Answer, the examiner contended, "[t]he rejection of claims 1-5 and 7-15 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof" (Examiner's Answer, page 2, section no. 7).

Appellant respectfully disagrees with the examiner and submits that both the requisite statement under 37 CFR 1.92(c)(7) and reasons in support thereof are provided in the Appeal Brief. Specifically, at Page 5 of the Appeal Brief, Appellant clearly states:

"For each ground of rejection which Appellants contests hereinbelow for which the rejection ground applies to more than one claim, the additional claims do not stand or fall together to the extent the claims are separately identified and argued below. Specifically, Appellants submit that Claims 1-7, 10-11 and 32-36 do not stand or fall together as to the rejection under 35 U.S.C. §102(b) and that Claims 8, 32 and 38 do not stand or fall together as to the rejections under 35 U.S.C. §103(a). Separately patentable as to the respective rejections under 35 U.S.C. §102 and 35 U.S.C. §103 are explained in more detail herein below for particular claims and/or groups of claims."

Appellant submits that the referenced paragraph reproduced hereinabove satisfies the requirements of 37 CFR 1.92(c)(7) for a 'statement' that the relevant claims 'do not stand or fall together'. As to 'support thereof', Appellant respectfully points out that separate support for the respective claims is provided in the Appeal Brief at Pages 9-10 regarding Claim 1, Pages 11-12 regarding Claim 3, Page 12 regarding Claim 4, Pages 12-13 regarding Claim 5, Page 13 regarding Claim 7, Pages 21-25 regarding Claim 8, Pages 13-14 regarding Claim 10, and Pages 14-15 regarding Claim 11. With respect to Claims 9 and 12-30, in the Final Office Action mailed October 20, 2003, the examiner deemed Claims 9 and 12-30 to be "allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim", which respectfully renders moot a need to provide arguments supporting the independent patentability of these claims.

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PRIOR ART OF RECORD

In the Examiner's Answer, the examiner cited only Booth et al., U.S. Patent No. 5,922,079, 07-1999, (hereinafter 'Booth et al.') under the heading '(9) Prior Art of Record', page 2, last line, to page 3, first line). However, for completeness, if not correctness, the examiner's identification of 'Prior Art of Record' should include Kanevsky et al., U.S. Patent No. 6,167,352 (hereinafter 'Kanevsky et al.'), and Preist et al., U.S. Patent No. 5,808,919 (hereinafter 'Preist et al.'), in addition to Booth et al., which were cited in separate 35 U.S.C. 103(a) rejections also.

RESPONSE TO ARGUMENT

The examiner concluded in the Examiner's Answer, "[f]or the above reasons, it is believed that the rejections should be sustained" (Examiner's Answer, page 19, 2nd full paragraph). Appellant respectfully disagrees with the examiner.

Claims 3, 4, 5, 7, 8, 10, 31, 35, 36 and 37

In particular, with respect to Issue 1, the examiner explicitly agreed in the Examiner's Answer ('EA') with Appellant's arguments regarding Claim 3 (EA, Response to Argument, page 11, 1st full paragraph, last line); Claim 4 (EA, Response to Argument, page 11, 2nd full paragraph, last line); Claim 5 (EA, Response to Argument, paragraph bridging pages 11-12, last line); Claim 7 (EA, Response to Argument, paragraph bridging pages 12-13, last line); Claim 10 (EA, Response to Argument, page 13, 2nd full paragraph, last line); Claim 35 (EA, Response to Argument, page 18, 1st full paragraph, last line); and Claim 36 (EA, Response to Argument, paragraph bridging pages 18-19, last line).

Furthermore, with respect to Issue 2, the examiner explicitly agreed with Appellant's arguments regarding Claim 8 (EA, Response to Argument, page 13, 1st full paragraph, last line). Moreover, with respect to Issue 4, the examiner explicitly agreed with Appellant's arguments regarding Claim 31 (EA, Response to Argument, page 14, last paragraph, last line); and Claim 37 (Response to Argument, page 19, 1st full paragraph, last line).

Appellant respectfully submits that the aforementioned explicit agreement by the examiner with Appellant's arguments regarding Claims 3, 4, 5, 7, 8, 10, 31, 35, 36

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and 37 constitutes unequivocal support by the examiner for actually reversing the rejections with respect to these claims. Therefore, contrary to the examiner's conclusion that "the rejections should be sustained" (cited above), it is respectfully submitted that the rejections of Claims 3, 4, 5, 7, 8, 10, 31, 35, 36 and 37 should have been withdrawn by the examiner.

Claims 1, 2, 6, 11, 32, 33 and 34

Regarding Issue 1, Claim 1, the examiner disagreed with Appellant's arguments that Booth et al. fail to disclose that claimed by Appellant. The examiner provided a description and discussion of a 'test system 100' according to Booth et al. and contended, "[t]he debug of the model [is] based on incorrect diagnosis" citing Col. 9, lines 33-34 of Booth et al. (EA, Response to Argument, page 10, line 6). The examiner further contended, "[h]istorical data may be used in conjunction with the model-based system; ... ; allowing evaluation of the effect of changes suggested by debugging on overall performance" citing Col. 11, lines 50-60 (EA, Response to Argument, page 10, lines 7-10). The examiner then concluded, "[t]his feature is seen to be an inherent teaching evaluating a diagnostic efficacy of the test suite using a probability of one or both of a correct diagnosis and incorrect diagnosis by the test suite as intended" (EA, Response to Argument, page 10, lines 10-13 (underline emphasis is the examiner's)).

Appellant provided in the Appeal Brief a detailed discussion of the differences between that disclosed by Booth et al. and that claimed by Appellant. In particular, beginning with the second full paragraph on Page 9 of the Appeal Brief, Appellant provided a detailed argument demonstrating that the 'historical data' and the disclosed use thereof by Booth et al. are unrelated to "evaluating a diagnostic efficacy of the test suite using a probability of one or both of a correct diagnosis and an incorrect diagnosis by the test suite", as recited in Appellant's Claim 1. Reiterating from the Appeal Brief, Booth et al. provide no "disclosure of a '*probability*' of a correct diagnosis' or disclosure of a '*probability*' of an incorrect diagnosis' or a disclosure of using one or both such *probabilities* in 'evaluating a diagnostic efficacy of the test suite'. The terms 'lists', 'violation operations', 'passing and failing tests', 'candidate diagnoses', or 'weights and penalties associated with candidate diagnoses' *are not*

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probabilities. Furthermore, notwithstanding the admonition of Booth et al. that "altering prior failure probabilities to correct a single diagnosis is rarely appropriate", 'prior failure probabilities' are not **probabilities** of a correct diagnosis or an incorrect diagnosis" (Appeal Brief, Page 10, first full paragraph, **emphasis** added). In short, Booth et al. are simply not concerned with and are certainly not employing probabilities as they are employed and claimed by Appellant. Therefore, Booth et al. fail to disclose that claimed by Appellant in Claim 1 as was made clear in the Appeal Brief.

In the Examiner's Answer, the examiner provided no arguments or evidence to refute the Appellant's arguments regarding the specific differences between that disclosed by Booth et al. and that recited in Appellant's Claim 1. Specifically, the examiner still has not established that Booth et al. disclose, explicitly or implicitly, "each element of the claim under consideration" (*W.L. Gore & Associates v. Garlock*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983) *cert. denied*, 469 U.S. 851 (1984)) and/or disclose the claimed elements "arranged as in the claim" (*Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984)) as required by the Federal Circuit for *prima facie* anticipation under 35 U.S.C. 102. In short, the examiner respectfully failed to demonstrate that there is "no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention." *Scripps Clinic & Research Found. v. Genentech Inc.*, 927 F.2d 1565, 18 USPQ 2d 1001, 1010 (Fed. Cir. 1991).

Instead, the examiner merely stated, "[t]he feature is seen to be an inherent teaching" of Booth et al. (EA, cited above). However, there is nothing in the teachings of Booth et al. that would lead one skilled in the art to conclude that claimed by Appellant is inherent in the teachings of Booth et al. Moreover respectfully, the examiner has failed to propose any factual basis or cogent line of reasoning to support such a case for inherency with respect to Booth et al.

In particular, as stated by the Federal Circuit, "[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic **necessarily** flows from the teachings of the applied prior art." *Ex parte Levy*, 17

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USPQ2d 1461, 1464 (Bd. Pat. App. & Int. 1990) (emphasis in original) (citing *In re King*, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986); *W.L. Gore & Assocs. v. Garlock, Inc.*, cited *supra*; *In re Oelrich*, 666 F.2d 578, 212 USPQ 323 (CCPA 1981); *In re Wilding*, 535 F.2d 631, 190 USPQ 59 (CCPA 1976); *Hansgirk v. Kemmer*, 102 F.2d 212, 40 USPQ 665 (CCPA 1939)). Moreover, "[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993)" (from MPEP 2112 *Requirements of Rejection Based on Inherency; Burden of Proof*). "To serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). Therefore, Appellant respectfully submits that inherency must be essentially an *inevitable* result or conclusion of that disclosed by the reference and not a product of possibilities or probabilities (see also *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)).

Regarding Claim 1, the examiner has failed to demonstrate the inevitability of the result or conclusion (i.e., 'inherent teaching') with respect to the reference. As such, it is respectfully submitted that the examiner's use of inherency with respect to Appellant's Claim 1 is fatally flawed.

As detailed hereinabove, the Examiner's Answer in no way negates or otherwise casts doubt on Appellant's argument in the Appeal Brief that that the Examiner erred in finally rejecting Claim 1 under 35 U.S.C. §102(b) because the legal requirements for a showing of *prima facie* anticipation under 35 U.S.C. §102(b) have not been met. As such, the examiner's contention that the rejection of Claim 1 "should be sustained" (EA, cited above) is respectfully without merit.

Regarding Issue 1, Claim 2, the examiner disagreed with Appellant's arguments and instead contended, "Booth et al. teach an automated analysis and troubleshooting system is provided that identifies problems with the test suite ... Booth et al. teach step of evaluating a diagnostic efficacy of the test suite (e.g., Col. 9, lines 14-15)

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using a probability of one or both of a correct diagnosis and incorrect diagnosis (failure probability term) by the test suite (e.g., a probability of detectability by the test suite, Col. 11, lines 15-18, lines 24-29, Col. 13, line 64)" (EA, Response to Argument, last paragraph bridging pages 10-11 (underline emphasis therein is the examiner's)).

Appellant respectfully disagrees with the examiner. In particular, as was discussed in the Appeal Brief:

"Booth et al. disclose neither "a probability of one or both of a correct diagnosis and incorrect diagnosis by the test suite" nor "evaluating a diagnostic efficacy of the test suite" using the probability. At Col. 9, lines 14-15, Booth et al. instead disclose that "the test suite may be evaluated for overall accuracy by analysis of historical data (FIG. 1, 126)". At Col. 11, lines 15-18, Booth et al. further disclose "[t]he diagnostic system maintains lists of violated operations, of passing and failing test, and of candidate diagnoses and their associated weights and penalties". Moreover, at Col. 11, lines 27-29, Booth et al. disclose "[a]s a result, altering prior failure probabilities to correct a single diagnosis is rarely appropriate (and not depicted in FIG. 3)" (Appeal Brief, Page 9, 2nd full paragraph).

Furthermore, at Col. 13, lines 63-65, Booth et al. disclose "automatically identifying components, the failure of which has a probability of detectability by the test suite that is low but greater than zero". While at Col. 13, line 64, Booth et al. disclose a 'probability', one skilled in the art would not confuse this disclosed 'probability of detectability' with the "probability of one or both of a correct diagnosis and incorrect diagnosis" claimed by Appellant. Moreover, none of the passages cited by the examiner have anything to do with "suggesting a test to add to the test suite to adjust an overall test coverage of the test suite", as recited in Appellant's Claim 2.

Thus, the Examiner's Answer in no way negates or otherwise casts doubt on Appellant's argument in the Appeal Brief that that the examiner erred in finally rejecting Claim 2 under 35 U.S.C. §102(b) because the legal requirements for a showing of *prima facie* anticipation under 35 U.S.C. §102(b) have not been met. As such, the examiner's contention that the rejection of Claim 2 "should be sustained" is respectfully without merit.

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Regarding Issue 1, Claim 6, the examiner disagreed with Appellant's arguments and instead contended, "Booth et al. teach evaluating a diagnostic efficacy of the test suite (e.g., Col. 9, lines 14-15) using a probability of one or both of a correct diagnosis and incorrect diagnosis (failure probability term) by the test suite (e.g., a probability of detectability by the test suite, Col. 11, lines 15-18, lines 24-29, Col. 13, line 64); and identifying a test to delete from the test suite, the deletable test having a minimal effect on an overall diagnostic efficacy of the test suite" (underline emphasis is the examiner's). The examiner contended, "e.g., if an incorrect diagnosis is made, the automated analysis system identifies ways of changing the rank order of diagnoses, including coverages that can be reduced and identification of operation violations that can be eliminated" citing the Abstract of Booth et al. (EA, Response to Argument, page 12, 1st full paragraph).

Appellant respectfully disagrees with the examiner. In particular, contrary to the examiner's contention, Booth et al. neither disclose nor suggest "identifying a test to *delete* from the test suite, the deletable test having a minimal effect on an overall diagnostic efficacy of the test suite", as recited in Appellant's Claim 6 (*emphasis added*). One skilled in the art would readily recognize that identifying 'ways of changing the rank order of diagnoses' is not equivalent to 'identifying a test to delete'. Instead, according to Booth et al., changing the rank order of diagnoses merely changes which diagnoses is considered most likely to be correct given the test results (see for example, Col. 5, line 60 to Col. 6, line 4, Booth et al.). Similarly, identifying test 'coverages that can be reduced' and 'operation violations that can be eliminated' as a means of changing the rank order of the diagnoses is not equivalent to or even related to "identifying a test to delete from the test suite, the deletable test having a minimal effect on an overall diagnostic efficacy of the test suite", as recited in Appellant's Claim 6.

Moreover, as a separate and independent consideration, Claim 6 is dependent from and includes all of the limitations of Claim 1. As has already been established hereinabove and in the Appeal Brief, Booth et al. fail to disclose or suggest that recited in Appellant's Claim 1.

As such, the Examiner's Answer in no way overcomes Appellant's argument in the Appeal Brief that that the examiner erred in finally rejecting Claim 6 under 35

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U.S.C. §102(b) because the legal requirements for a showing of *prima facie* anticipation under 35 U.S.C. §102(b) have not been met. As such, the examiner's contention that the rejection of Claim 6 "should be sustained" (EA, cited above) is respectfully without merit.

Regarding Issue 1, Claim 11, the examiner disagreed with Appellant's arguments that Booth et al. fail to disclose that claimed by Appellant. The examiner contended, "Booth et al. teach the test suite analysis 116 and model debug analysis 120 can be used with simulated data 124" citing Col. 6, lines 52-54, and further contended, "[e]ither simulated data (FIG. 1, 124) or historical TFC data (FIG. 1, 126) may be used for such analysis". The examiner concluded, "[i]f failure distribution information is available, the simulated failures may be created accordingly" citing Col. 9, lines 4-8, and noted that while "Booth et al. do not specifically disclose the claimed creating a simulation database of test suite [*sic*], this feature is seen to be an inherent teaching of that step since the test suite analysis 116 can be used with simulated data 124 (Col. 6, lines 52-54)" (EA, Response to Argument, last paragraph bridging pages 13-14 up to line 7). The examiner further contended that "some type of creating a simulation database of test suite [*sic*] must be present for determining probability of one or both a correct diagnosis and an incorrect diagnosis for the test suite as intended" (EA, Response to Argument, page 14, lines 10-12). The examiner further concluded, "Booth et al. teach step of determining a probability of one or both a correct diagnosis and an incorrect diagnosis for the test suite using the database (e.g., Col. 11, lines 15-18, lines 27-29); using the determined a probability [*sic*] to evaluate the test suite (e.g., Col. 9, lines 14-15)" (EA, Response to Argument, page 14, lines 12-16 (underline emphasis is the examiner's)).

Appellant respectfully disagrees with the examiner. As noted by the examiner, Booth et al. do not disclose "creating a simulation database of the test suite" (cited above). While it may be argued that "some type of creating a simulation database" *may* be present in the teachings of Booth et al., it is by no means an inherent teaching. For example, Booth et al. never disclose or suggest how such a database may be used in conjunction with their teachings. Despite the examiner's arguments, it is decidedly *not* clear that the alleged inherent teaching is "necessarily present in the thing described in the reference", and not merely a product of "possibilities or probabilities"

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on the part of the examiner. *In re Robertson*, cited *supra*. Furthermore, there is no evidence that the 'some type' of simulation database proposed by the examiner is or would reasonably be understood by one skilled in the art to be equivalent to the simulation database claimed by Appellant.

Moreover, as has been separately discussed at length in the Appeal Brief and reiterated hereinabove with respect to Claim 1, Booth et al. *never* disclose or suggest "determining a probability of a correct diagnosis and a probability of an incorrect diagnosis for the test suite using the database", as recited in Appellant's Claim 11. For that matter, Booth et al. never disclose or suggest 'a probability of a correct diagnosis' or 'a probability of an incorrect diagnosis' in any form whatsoever.

As such, contrary to the examiner's contention, Booth et al. cannot disclose using the simulation database to "determining a probability of one or both of a correct diagnosis and an incorrect diagnosis for the test suite", as recited in Claim 11. Finally, without 'determining', Booth et al. cannot possibly disclose or suggest "using the determined probability to evaluate the test suite", as further recited in Appellant's Claim 11.

Therefore, the Examiner's Answer in no way negates or otherwise diminishes Appellant's argument in the Appeal Brief that that the examiner erred in finally rejecting Claim 11 under 35 U.S.C. §102(b) because the legal requirements for a showing of *prima facie* anticipation under 35 U.S.C. §102(b) have not been met. As such, the examiner's contention that the rejection of Claim 11 "should be sustained" (EA, cited above) is respectfully without merit.

Regarding Issue 1, Claim 32, the examiner disagreed with Appellant's arguments that Booth et al. fail to disclose that claimed by Appellant. The examiner's response to Appellant's arguments from the Appeal Brief are a verbatim restatement of those for Claim 1 (EA, Response to Argument, paragraph bridging pages 15-16 to line 9. The examiner concluded, "[t]his feature is seen to be an inherent teaching a computer program [*sic*] stored in the memory and executed by the processor, wherein the computer program comprises instructions that, when executed by the processor, implement evaluating the test suite using a probability of incorrect diagnosis by the test suite to determine the efficacy as intended" (EA, Response to Argument, page 16, lines 9-13).

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The examiner has provided no arguments or evidence to refute Appellant's arguments in the Appeal Brief regarding the specific differences between that disclosed by Booth et al. and that recited in Appellant's Claim 32 (Appeal Brief, pages 15-17). Specifically, the examiner still has not established that Booth et al. disclose, explicitly or implicitly, "each element of the claim under consideration" (*W.L. Gore & Associates v. Garlock*, cited *supra*) and/or disclose the claimed elements "arranged as in the claim" (*Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, cited *supra*) as required by the Federal Circuit for *prima facie* anticipation under 35 U.S.C. 102.

Instead, the examiner merely stated, "[t]he feature is seen to be an inherent teaching" (EA, cited above) of Booth et al. However, there is nothing in the teachings of Booth et al. that would lead one skilled in the art to conclude that claimed by Appellant is inherent in the teachings of Booth et al. Moreover, the examiner has failed to propose any factual basis or cogent line of reasoning to support such a case for inherency with respect to Booth et al. Specifically, the examiner has failed to "provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art." *Ex parte Levy*, cited *supra*. As such, it is respectfully submitted that the examiner's use of inherency is fatally flawed.

Hence, the Examiner's Answer in no way negates or otherwise casts doubt on Appellant's argument in the Appeal Brief that that the examiner erred in finally rejecting Claim 32 under 35 U.S.C. §102(b) because the legal requirements for a showing of *prima facie* anticipation under 35 U.S.C. §102(b) have not been met. As such, the examiner's contention that the rejection of Claim 32 "should be sustained" (EA, cited above) respectfully is without merit.

Regarding Issue 1, Claim 33, the examiner disagreed with Appellant's argument. The examiner contended, "Booth et al. disclose an automated analysis system that identifies detectability problems, diagnosability problems, and possible ways to change rank order of diagnoses in a diagnostic system and makes the problems and possible improvements visible to test programmers to aid in test improvement ... [i]n addition, if an incorrect diagnosis is made, the automated analysis system identifies ways of changing the rank order of diagnoses, including

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coverages that can be reduced and identification of operation violations that can be eliminated or deliberately added (Abstract)" (EA, Response to Argument, paragraph bridging pages 16-17). The examiner concludes, "[t]his feature is seen to be an inherent teaching the instructions that evaluate the test suite comprise one or both of suggesting a test to add to the test suite, and identifying a test to delete from the test suite as intended" (EA, Response to Argument, page 17, lines 8-11).

Appellant respectfully disagrees with the examiner. In particular, contrary to the examiner's contention, Booth et al. neither disclose nor suggest either or both of "suggesting a test to add to the test suite" and "identifying a test to delete from the test suite", as recited in Appellant's Claim 33. As was discussed hereinabove with respect to separately patentable Claim 6, one skilled in the art would readily recognize that identifying 'ways of changing the rank order of diagnoses' is not equivalent to either of 'identifying a test to delete' or 'suggesting a test to add'. Instead, according to Booth et al., changing the rank order of diagnoses merely changes which diagnoses is considered most likely to be correct given the test results (see for example, Col. 5, line 60 to Col. 6, line 4, Booth et al.). Similarly, identifying test 'coverages that can be reduced' and 'operation violations that can be eliminated or deliberately added' as a means of changing the rank order of the diagnoses is not equivalent to or even related to that recited in Appellant's Claim 33.

Furthermore, the examiner's use of 'inherency' with respect to the teachings of Booth et al. regarding Claim 33 is respectfully fatally flawed since neither the teaching of Booth et al. by themselves nor any factual basis or cogent line of reasoning provided by the examiner support such a case for inherency with respect to Booth et al. In short, the examiner failed to establish that "the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill". *In re Robertson*, cited *supra*.

Moreover, as a separate and independent consideration, Claim 33 is dependent from and includes all of the limitations of Claim 32. As has already been established hereinabove and in the Appeal Brief, Booth et al. fail to disclose or suggest that recited in Appellant's Claim 32.

Thus, the Examiner's Answer in no way overcomes or negates Appellant's argument in the Appeal Brief that that the Examiner erred in finally rejecting Claim

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33 under 35 U.S.C. §102(b) because the legal requirements for a showing of *prima facie* anticipation under 35 U.S.C. §102(b) have not been met. As such, the examiner's contention that the rejection of Claim 33 "should be sustained" (EA, cited above) is respectfully without merit.

Regarding Issue 1, Claim 34, the examiner disagreed with Appellant's arguments that Booth et al. fail to disclose that claimed by Appellant. The examiner contended, "Booth et al. teach the test suite analysis 116 and model debug analysis 120 can be used with simulated data 124" citing Col. 6, lines 52-54 and further contended, "[e]ither simulated data (FIG. 1, 124) or historical TFC data (FIG. 1, 126) may be used for such analysis" (EA, Response to Argument, page 17, last paragraph). The examiner concluded, "[i]f failure distribution information is available, the simulated failures may be created accordingly" citing Col. 9, lines 4-8, and noted that while "Booth et al. do not specifically disclose the claimed creating a simulation database of test suite [*sic*], this feature is seen to be an inherent teaching of that step since the test suite analysis 116 can be used with simulated data 124 (Col. 6, lines 52-54)" (EA, Response to Argument, page 17, last paragraph to page 18, line 2). The examiner further contended that "some type of creating a simulation database of test suite [*sic*] must be present for determining probability of one or both a correct diagnosis and an incorrect diagnosis for the test suite as intended" (EA, Response to Argument, page 18, lines 5-7). The examiner further concluded, "Booth et al. teach step of determining a probability of one or both a correct diagnosis and an incorrect diagnosis for the test suite using the database (e.g., Col. 11, lines 15-18, line 27-29); using the determined a [*sic*] probability to evaluate the test suite (e.g., Col. 9, lines 14-15)" (EA, Response to Argument, page 18, lines 8-11).

Appellant respectfully disagrees with the examiner. As noted by the examiner, Booth et al. do not disclose "creating a simulation database of the test suite". While it may be argued that "some type of creating a simulation database" *may* be present in the teachings of Booth et al., it is by no means an inherent teaching. For example, Booth et al. never disclose or suggest how such a database may be used in conjunction with their teachings. Despite the examiner's arguments, it is decidedly *not* clear that the alleged inherent teaching is "necessarily present in the thing described in the reference", and not merely a product of "possibilities or probabilities" on the part of

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the examiner. *In re Robertson*, cited *supra*. Furthermore, there is no evidence that the 'some type' of simulation database proposed by the examiner is or would reasonably be understood by one skilled in the art to be equivalent to the simulation database claimed by Appellant.

Moreover, as has been separately discussed at length in the Appeal Brief and reiterated hereinabove with respect to Claim 1, Booth et al. *never* disclose or suggest "determining a probability of a correct diagnosis and a probability of an incorrect diagnosis for the test suite using the database", as recited in Appellant's Claim 34. For that matter, Booth et al. never disclose or suggest 'a probability of a correct diagnosis' or 'a probability of an incorrect diagnosis' in any form whatsoever.

As such, contrary to the examiner's contention, Booth et al. cannot disclose using the simulation database to "determining a probability of one or both of a correct diagnosis and an incorrect diagnosis for the test suite", as recited in Claim 34. Finally, without 'determining', Booth et al. cannot possibly disclose or suggest "using the determined probability to evaluate the test suite", as further recited in Appellant's claim 34.

As such, the Examiner's Answer in no way negates or otherwise diminishes Appellant's argument in the Appeal Brief that that the examiner erred in finally rejecting Claim 34 under 35 U.S.C. §102(b) because the legal requirements for a showing of *prima facie* anticipation under 35 U.S.C. §102(b) have not been met. Thus, the examiner's contention that the rejection of Claim 34 "should be sustained" (EA, cited above) is respectfully without merit.

Claim 38

With respect to Issue 3, Claim 38, the examiner was silent in the Examiner's Answer on Appellant's arguments with respect to Claim 38, which were provided in Appellant's Appeal Brief, pages 26-27. Appellant submits that the arguments provided in the Appeal Brief are sufficient to overcome the rejection of Claim 38 under 35 U.S.C. 103(a). Therefore, the examiner's assertion that the rejection "should be sustained" (EA, cited above) is respectfully without merit.

For the above reasons, Appellant believes that nothing presented by the examiner in the Examiner's Answer changes the conclusions of the Appeal Brief. In

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particular, the examiner explicitly stated an agreement with Appellant regarding Claims 3, 4, 5, 7, 8, 10, 31, 35, 36 and 37. As such, the rejections of these claims should have been withdrawn by the examiner and not sustained in the Examiner's Answer. Moreover, the examiner's reasons for disagreement with Appellant regarding Claims 1, 2, 6, 11, 32, 33 and 34 have been sufficiently refuted by Appellant in Appellant's Appeal Brief and herein.

As such, Appellant still submits that Claims 1-38 are separately patentable, as provided above and in the Appeal Brief. Accordingly, Appellant respectfully requests that the Board of Patent Appeals and Interferences reverse each of the rejection of Claim 1-7, 10-11 and 32-36 under 35 U.S.C. §102(b), the rejections of Claims 8, 32 and 38 under 35 U.S.C. §103(a), and the rejection of Claims 31 and 37 under no grounds, and withdraw the objection to Claims 9 and 12-30.

Respectfully submitted,

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CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office on the date shown below.


J. Michael Johnson

1/12/05
Date

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